UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,493	07/27/2001	Daniel Cook Jarvis	10010790-1	9794

7590   06/16/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER
MILIA, MARK R

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/917,493	JARVIS ET AL.
	Examiner	Art Unit	
	Mark R. Milia	2625	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*22 August 2005*</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-37*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-37*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>*22 August 2005*</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Applicant's amendment was received on 8/22/05 and has been entered and

made of record. Currently, claims 1-37 are pending.

Drawings

2.   Applicant's amendment to Fig. 5 to remove reference character "560" has

overcome the objection as cited in the previous Office Action. Therefore the objection

has been withdrawn.

Specification

3.   Applicant's amendments to the abstract and the specification have overcome the

objection as cited in the previous Office Action. Therefore the objection has been

withdrawn.

Claim Objections

4.   Applicant's amendment to cancel a second claim numbered "34" has overcome

the objection as cited in the previous Office Action. Therefore the objection has been

withdrawn.

Response to Arguments

5.   Applicant's arguments filed 8/22/05 have been fully considered but they are not

persuasive.

        In response to applicant's arguments, wherein on pages 12-17, the applicant

asserts that the reference of Yan fails to disclose "an application program loaded on the

printer, wherein a manager invokes functionality on and receives results from the

application program via an agent remotely located from the application program", as

recited in claims 1, 6, and 25, and "wherein the agent initiates management events

including requesting amount of resources being utilized by each applet operating on the

virtual machine", as recited in claims 17 and 32. The examiner respectfully disagrees

as Yan does disclose such features. Particularly, Yan discloses an executable

computer program section "226" which is loaded into the printer that is enabled by the

peripheral API to access functionality associated with the device (see column 9 lines 43-

49). Further, when a host computer makes a call to the peripheral API, the peripheral

device can download a specific application or applet into the virtual machine instruction

processor "214", which is analogous to an application loaded on the printer as set forth

in claims 1, 6, and 25 (see column 10 lines 38-44). Even further, Yan states that the

application or applet is already stored in the peripheral device (see column 19 lines 31-

34). Also, the host computer is located remotely from the printer via a network and the

host computer (manager) makes calls to the printer to perform desired tasks (invokes

functionality), such as printing, and receives the desired results, all of which is

analogous to the claimed limitations as set forth in claims 1, 6, and 25 and therefore is

still anticipated by Yan. In addition, Yan discloses administration and management of

resources and capabilities of peripheral devices. Yan states that an applet can be

executed to determine what areas of the printer device need repair or are close to being

depleted, such information as the amount of paper available, amount of toner, etc (see

column 22 line 57-column 23 line 12). Therefore Yan can still be seen as anticipating

claims 17 and 32.

6.   Therefore, the rejection of claims 1-36, as cited in the previous Office Action, is

maintained and repeated in this Office Action. Newly added claim 37 will be addressed

in the following rejection.

Claim Rejections - 35 USC § 102

7.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

8.   Claims 1-19, 22-32, and 34-36 are rejected under 35 U.S.C. 102(b) as being

anticipated by U.S. Patent No. 6003065 to Yan et al. as cited on Information Disclosure

Statement dated January 8, 2002.

Regarding claim 1, Yan discloses a manager loadable printer comprising an

application program loaded on the printer, wherein a manager invokes functionality on

and receives results from the application program via an agent remotely located from

the application program (see Figs. 1-3, column 9 lines 26-56, column 10 lines 23-63,

column 11 lines 7-19, column 18 lines 34-40 and 58-63, column 19 lines 23-57, column

22 lines 25-33, and column 23 lines 13-46).

Regarding claim 6, Yan discloses a method of instructing a printer having a

virtual machine, the method comprising: providing an agent, the agent having an

associated applet (see column 23 lines 13-65), loading the applet on the virtual machine

(see column 23 lines 13-65), and executing the applet on the virtual machine, wherein a

manager invokes functionality on and receives results from the applet via an agent

remotely located from the applet (see Figs. 1-3, column 9 lines 26-56, column 10 lines

23-63, column 11 lines 7-19, column 18 lines 34-40 and 58-63, column 19 lines 23-57,

column 22 lines 25-33, and column 23 lines 13-65).

Regarding claim 17, Yan discloses a printer comprising an applet (see column 19

lines 23-57, column 22 lines 22-33, and column 23 lines 13-65), a virtual machine

capable of executing the applet (see Figs. 1 and 2, column 19 lines 23-57, column 22

lines 22-33, and column 23 lines 13-65), and an interface for communication between

the printer and a remote agent, wherein the agent initiates management events

including requesting amount of resources being utilized by each applet operating on the virtual machine (see Figs. 1 and 2, column 10 lines 24-55, column 15 lines 1-10, column 16 lines 15-19, and column 22 line 57-column 23 line 12).

Regarding claim 25, Yan discloses a method of instructing a printer having a virtual machine comprising: serving an applet to the printer (see column 22 lines 19-33), executing the applet on the virtual machine to produce a result (see Fig. 2, column 19 lines 33-57, and column 22 lines 19-33), communicating the result from the printer to an agent remotely located from the printer (see column 22 line 57-column 23 line 8), and communicating the result from the agent to a manager (see column 23 lines 13-65).

Regarding claim 32, Yan discloses a printer comprising an applet (see column 19 lines 23-57, column 22 lines 22-33, and column 23 lines 13-65), execution means for executing the applet (see Figs. 1 and 2, column 19 lines 23-57, column 22 lines 22-33, and column 23 lines 13-65), and an interface means for communicating between the printer and a remote agent, wherein the remote agent initiates management events to be performed by the applet including requesting amount of resources being utilized by each applet operating on the printer (see Figs. 1 and 2, column 10 lines 24-55, column 15 lines 1-10, column 16 lines 15-19, and column 22 line 57-column 23 line 12).

Regarding claim 2, Yan discloses the system discussed in claim 1, and further discloses wherein the application program comprises an applet served by a manager (see column 9 lines 26-30, column 10 lines 37-44, column 19 lines 23-57, column 22 lines 22-33 and 46-51, and column 23 lines 13-65).

Regarding claim 3, Yan discloses the system discussed in claim 1, and further

discloses wherein the application program comprises an applet served by the manager

and further comprising a virtual machine capable of executing the applet (see column 7

lines 3-15, column 8 lines 46-49, column 9 lines 26-40, column 10 lines 37-44, column

19 lines 23-57, column 22 lines 22-33 and 46-51, and column 23 lines 13-65).

Regarding claim 4, Yan discloses the system discussed in claim 1, and further

discloses an interface for communication with the agent (see Fig. 2, column 9 line 63-

column 10 line 10, and column 10 lines 24-28).

Regarding claim 5, Yan discloses the system discussed in claim 1, and further

discloses wherein the application program comprises an applet comprising printer

instructions (see column 11 lines 10-14 and 31-40, column 22 lines 22-33, and column

23 lines 58-61).

Regarding claim 7, Yan discloses the system discussed in claim 6, and further

discloses communicating the executing step to the agent (see column 23 lines 13-65).

Regarding claim 8, Yan discloses the system discussed in claim 7, and further

discloses communicating from the agent to the manager (see column 23 lines 35-37).

Regarding claim 9, Yan discloses the system discussed in claim 6, and further

discloses wherein the applet includes print job accounting instructions (see column 23

lines 3-6 and 13-65).

Regarding claim 10, Yan discloses the system discussed in claim 6, and further

discloses wherein the executing step includes print job accounting (see column 22 line

60-column 23 line 1).

Regarding claim 11, Yan discloses the system discussed in claim 6, and further discloses wherein the loading includes serving an applet to a printer via a network (see Fig. 1 and column 23 lines 13-65).

Regarding claim 12, Yan discloses the system discussed in claim 11, and further discloses wherein the network includes the Internet (see column 23 line 66-column 24 line 4).

Regarding claim 13, Yan discloses the system discussed in claim 6, and further discloses wherein the providing includes loading the agent on a workstation (see Figs. 1 and 2).

Regarding claim 14, Yan discloses the system discussed in claim 6, and further discloses wherein the providing includes loading the agent on a server (see Figs. 1 and 2).

Regarding claim 15, Yan discloses the system discussed in claim 6, and further discloses wherein the agent executes on a virtual machine (see Figs. 1 and 2).

Regarding claim 16, Yan discloses the system discussed in claim 6, and further discloses wherein the applet includes an instruction selected from the group consisting of alerting, embedding, configuring, setting, and combinations thereof 9see column 23 lines 47-65).

Regarding claim 18, Yan discloses the system discussed in claim 17, and further discloses wherein the interface comprises a protocol adaptor (see column 6 lines 52-56, column 6 line 63-column 7 line 3, and column 9 line 65-column 10 line 2).

Regarding claim 19, Yan discloses the system discussed in claim 17, and further

discloses wherein the interface comprises a connector (see column 18 lines 40-57).

Regarding claim 22, Yan discloses the system discussed in claim 17, and further

discloses wherein the interface comprises TCP/IP (see column 6 lines 52-56, column 6

line 63-column 7 line 3, column 9 line 65-column 10 line 2, and column 15 lines 62-67).

Regarding claim 23, Yan discloses the system discussed in claim 17, and further

discloses wherein the agent communicates with a manager (see column 6 line 60-

column 7 line 15 and column 8 lines 1-24).

Regarding claim 24 Yan discloses the system discussed in claim 17, and further

discloses wherein the applet includes printer instructions (see column 11 lines 10-14

and 31-41, column 22 lines 22-33, and column 23 lines 58-61).   .

Regarding claim 26, Yan discloses the system discussed in claim 25, and further

discloses wherein the serving includes loading the applet into memory on the printer

(see Fig. 2 (216), column 8 lines 25-30, and column 9 lines 26-30).

Regarding claim 27, Yan discloses the system discussed in claim 25, and further

discloses initiating the executing via a manager and the agent (see column 22 line 57-

column 23 line 65).

Regarding claim 28, Yan discloses the system discussed in claim 25, and further

discloses communicating arguments from a manager to the agent (see column 22 line

57-column 23 line 65).

Regarding claim 29, Yan discloses the system discussed in claim 25, and further

discloses wherein the communicating from the printer to the agent includes

communicating via a network (see Fig. 1, column 6 lines 52-56, and column 23 lines 13-46).

Regarding claim 30, Yan discloses the system discussed in claim 25, and further discloses wherein the serving includes serving an applet to a plurality of printers each having a virtual machine (see column 22 lines 46-51).

Regarding claim 31, Yan discloses the system discussed in claim 25, and further discloses a computer-readable medium containing a computer program that is storable in memory and executable by a processor to configure a printer and at least one computer (see column 6 line 51-column 7 line 48).

Regarding claim 35, Yan discloses the system discussed in claim 32, and further discloses wherein the agent communicates with a manager (see column 6 line 60-column 7 line 15 and column 8 lines 1-24).

Regarding claim 36, Yan discloses the system discussed in claim 32, and further discloses wherein the applet includes printer instructions (see column 11 lines 10-14 and 31-41, column 22 lines 22-33, and column 23 lines 58-61).

Regarding claim 37, Yan discloses the system discussed in claim 32, and further discloses wherein the interface means comprises TCP/IP (see column 6 lines 52-56, column 6 line 63-column 7 line 3, column 9 line 65-column 10 line 2, and column 15 lines 62-67).

Claim Rejections - 35 USC § 103

9.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10.   Claims 20 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yan as applied to claims 17 and 32 above, and further in view of U.S. Patent No. 6823504 to Sokolov.

Yan does not disclose expressly wherein the interface comprises a syntax and a syntax parser.

Sokolov discloses wherein the interface comprises a syntax and a syntax parser (see column 3 lines 23-43, column 3 line 58-column 4 line 7, and column 4 line 65-column 5 line 15).

Yan & Sokolov are combinable because they are from the same field of endeavor, interpreting and executing Java programs.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the syntax parser as described by Sokolov with the system of Yan.

The suggestion/motivation for doing so would have been to provide translation of the source code to allow execution of the instructions embedded within the source code (the use of syntax parsers are well known in the art to dissect source code so it can be translated in object code which is used by a computing system to execute the instructions).

Therefore, it would have been obvious to combine Sokolov with Yan to obtain the invention as specified in claims 20 and 33.

11.   Claims 21 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yan as applied to claim 17 above, and further in view of U.S. Patent No 6763499 to Friedman et al.

Yan does not disclose expressly wherein the interface comprises XML and an XML parser.

Friedman discloses wherein the interface comprises XML and an XML parser.

Yan & Friedman are combinable because they are from the same field on endeavor, interpretation and execution of source code.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the XML parser as described by Friedman with the system of Yan.

The suggestion/motivation for doing so would have been to provide translation of the source code to allow execution of the instructions embedded within the source code (the use of syntax parsers are well known in the art to dissect source code so it can be translated in object code which is used by a computing system to execute the instructions).

Therefore, it would have been obvious to combine Friedman with Yan to obtain the invention as specified in claims 21 and 34.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mark R. Milia whose telephone number is (571) 272-

7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

                                        Mark R. Milia
                                        Examiner
                                        Art Unit 2625

MRM

                              JOSEPH R. POKRZYWA
                              PRIMARY EXAMINER